| Inde | x of C | Claims |  |
|------|--------|--------|--|
|      |        |        |  |

| Application No. | Applicant(s)       |  |
|-----------------|--------------------|--|
| 10/624,639      | MIZUKOSHI, HIROSHI |  |
| Examiner        | Art Unit           |  |
| James M Hewitt  | 3679               |  |

|   | Rejected | - | (Through numeral)<br>Cancelled |
|---|----------|---|--------------------------------|
| • | Allowed  | ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ī | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|             |            |          |          |              |  |          | ,        |          |          |              |     |               |          |  |              |               |              | ,            | Ь—   |              | _        |
|-------------|------------|----------|----------|--------------|--|----------|----------|----------|----------|--------------|-----|---------------|----------|--|--------------|---------------|--------------|--------------|--|--------------|----------|
| Cla         | aim        | Г        | _        |              |  | Dat      | —<br>е   |          |          | -            | ]   | Cla           | aim      | Π  |              |               |              | Date         |  |              |          |
|             |            |          | Π        | Г            | T  | <u> </u> | Ť        | Г        | П        | Т            |     | <del></del>   |          | 一  |              | _             | Γ-           |              | Ť  |              |          |
| <del></del> | Original   | 8        |          | l            |  | l        | l        |          | 1        |              |     | <u> </u>      | Original |  |              |               |              | ļ            |  |              |          |
| Final       | [ <u>.</u> | 3/23/05  |          | l            | ļ  |          | l        | l        |          |              |     | Final         | <u>:</u> |  |              |               |              |              |  |              |          |
| ۳.          | ō          | િ        |          | l            | 1  |          |          |          | l        |              | -   | "             | ŏ        |  |              |               |              |              |  |              | Ì        |
| 4           |            | ┢        | -        | ⊢            | ┝  | ├        | H        | -        | ├        | -            |     | ├             |          | ├  | <del> </del> | ⊢             | ⊢            | _            | ⊢  | -            | -        |
| 1           | 1          | =        | <u> </u> | L            | <u> </u>   | <u> </u> | -        | <u> </u> | ⊢        | <u> </u>     | . : |               | 51       | <u> </u>   | <u> </u>     | _             | <u> </u>     | L.           | <u> </u>   | _            | <u> </u> |
| 2           | 2          | =        | <u> </u> | <u> </u>     | ┞  | ├        | ▙        | ├_       | ┞        |              |     |               | 52       | _  | <u> </u>     | _             | <u> </u>     | <u> </u>     | <u> </u>   | <u> </u>     | <u> </u> |
| 3           | 3          | =        | _        | L            | ┞  | <u> </u> | <u> </u> | <u> </u> | _        | _            | Į.  | L             | 53       | <u> </u>   | 느            | _             | <u> </u>     |              | <u> </u>   |              | L_       |
| 4           | 4          | =        |          |              | ㄴ  |          | ļ        | L        | ㄴ        | <u> </u>     |     |               | 54       | <u> </u>   |              |               | L            |              | L  |              |          |
| 5           | 5          | =        |          | _            | <u> </u>   | <u> </u> | <u> </u> | 匚        | <u> </u> | <u> </u>     |     |               | 55       | ╙  | L            | L             | <u> </u>     |              | <u> </u>   | _            | _        |
| 6           | 6          | =        |          |              | L  |          |          | L        | 乚        | <u></u>      |     |               | 56       |  |              |               |              |              | L  |              | _        |
| 7           | 7          | =        |          |              |  | L        | L        | L        | L        | L            |     |               | 57       | L  |              | L             |              |              | _  | $oxed{oxed}$ |          |
|             | 8          |          |          | L            | L  |          | L        | _        | L        | L            |     |               | 58       |  | ŀ            |               |              |              |  |              |          |
|             | 9          |          |          |              | L.   | L        |          |          | İ        |              |     |               | 59       |  |              |               |              |              |  |              |          |
|             | 10         |          |          |              |  |          |          |          |          |              | :   |               | 60       |  |              |               |              |              |  |              | Ι        |
|             | 11         |          |          |              |  |          |          |          | П        | Γ            |     |               | 61       | Г  | Г            |               |              | Γ            | Г  |              |          |
|             | 12         |          |          |              | Г  |          |          | Г        | Г        |              |     |               | 62       | Π  |              |               |              |              |  |              | _        |
|             | 13         |          |          |              | _  |          |          |          | Г        |              | ١., | $\overline{}$ | 63       |  |              |               |              | Г            | _  |              | _        |
|             | 14         | $\vdash$ | $\vdash$ |              | 1  | П        |          |          | Т        | <b>-</b>     |     |               | 64       |  |              |               | $\vdash$     |              |  |              | _        |
|             | 15         |          |          |              | t  | -        |          | 1        | T        | $\vdash$     |     |               | 65       | <del>                                     </del> | $\vdash$     | _             | _            | _            | _  | $\vdash$     | $\vdash$ |
|             | 16         |          |          |              |  |          |          | $\vdash$ | $\vdash$ | $\vdash$     | 1   |               | 66       | _  |              | _             | $\vdash$     | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$ |
|             | 17         | _        | _        | $\vdash$     | $\vdash$   | ┢        | 一        | $\vdash$ | ┢        | ┢            |     |               | 67       | ┢  | -            | _             | $\vdash$     | $\vdash$     | $\vdash$   |              | ⊢        |
|             | 18         | _        |          | -            | $\vdash$   | $\vdash$ | ╁        | -        | $\vdash$ | H            |     |               | 68       |  |              | _             | $\vdash$     | ┢            | $\vdash$   | -            | ⊢        |
|             | 19         | _        |          |              | $\vdash$   | $\vdash$ | -        | -        | ⊢        | $\vdash$     |     |               | 69       | ├  |              |               | <del> </del> | -            | _  | -            | ⊢        |
|             | 20         |          | -        |              |  | -        |          | -        | ⊢        | <del> </del> | .   |               | 70       |  | -            | _             | <u> </u>     | $\vdash$     | ⊢  | -            | -        |
|             | 21         |          | -        | -            | ⊢  |          | -        | _        | ⊢        | -            |     |               |          | _  | _            | _             | H            | _            | -  | _            | _        |
|             | 21         |          | -        | <del> </del> | _  | ├-       | H        |          | ⊢        | <u> </u>     |     |               | 71       | L  | _            | _             |              | <u> </u>     | -  | -            | -        |
|             | 22         |          | <u> </u> | <u> </u>     |  | <u> </u> | -        |          | ⊢        | L            |     |               | 72       | <u> </u>   | <u> </u>     | _             | <u> </u>     | <u> </u>     | <u> </u>   | _            | <u> </u> |
|             | 23         | _        | _        | ⊢            | ⊢  | _        | _        |          | <u> </u> |              |     |               | 73       | L  | <u> </u>     | _             | <u> </u>     | <u> </u>     |  | _            | _        |
|             | 24         |          | _        | <u> </u>     | ļ  | <u> </u> | ┡        | _        | _        | _            |     |               | 74       | <u> </u>   | <u> </u>     | _             | _            | <u> </u>     | lacksquare                                       | $\vdash$     | <u> </u> |
|             | 25         |          | _        | <u> </u>     | _  | _        | _        | _        |          |              |     |               | 75       | _  | <u> </u>     |               |              |              |  |              |          |
|             | 26         |          | _        | Ŀ            | _  | L        | L        |          |          |              |     |               | 76       | _  | _            |               | _            | L_           |  |              |          |
|             | 27         |          | _        |              |  |          |          |          |          |              |     |               | 77       |  |              |               |              | $oxed{oxed}$ |  |              |          |
|             | 28         |          | _        | <u>_</u>     | L  | <u> </u> | 匚        |          |          |              |     |               | 78       | _  | L            |               |              |              |  |              | L        |
|             | 29         |          |          |              |  | <u></u>  | _        |          |          |              | 7   |               | 79       | _  |              |               |              |              |  |              |          |
|             | 30         |          |          |              | Ŀ  |          |          |          |          |              |     |               | 80       |  |              |               |              |              |  |              |          |
|             | 31         |          |          | L            |  |          |          |          |          |              |     |               | 81       |  |              |               |              |              |  |              |          |
|             | 32         |          |          |              |  |          |          |          | _        |              | ::  |               | 82       |  |              |               |              |              |  |              |          |
|             | 33         |          |          |              | П  | Г        |          |          |          |              | . 1 |               | 83       |  |              |               |              |              |  |              |          |
|             | 34         |          |          |              |  |          |          |          |          |              |     |               | 84       |  |              |               |              |              | •  |              |          |
|             | 35         |          |          |              |  |          |          |          | Г        |              |     |               | 85       |  |              |               |              |              |  |              |          |
|             | 36         |          |          |              |  |          |          |          |          |              |     |               | 86       |  |              | $\overline{}$ |              |              |  |              |          |
|             | 37         |          |          | _            |  |          |          | _        |          |              |     |               | 87       |  |              |               |              | _            |  |              |          |
|             | 38         |          | _        |              |  |          |          |          |          | Н            |     |               | 88       | _  |              | _             |              |              |  | _            | _        |
|             | 39         |          |          | $\vdash$     |  | H        |          | $\vdash$ | $\vdash$ | Н            |     |               | 89       | Н  | -            |               | -            |              |  | $\vdash$     | _        |
|             | 40         |          |          |              |  | $\vdash$ |          | $\vdash$ | $\vdash$ | $\vdash$     |     |               | 90       | -  | Н            |               |              | Н            | _  | $\vdash$     | $\vdash$ |
|             | 41         |          | _        | _            | -  | -        | H        | H        | ┢        | $\vdash$     |     |               | 91       |  | Н            |               | _            | Н            | _  |              | -        |
|             | 42         |          | _        | $\vdash$     | <del>                                     </del> |          |          | $\vdash$ | -        | $\vdash$     |     | $\vdash$      | 92       | Н  | Н            | $\vdash$      | Η-           | $\vdash$     | <del>                                     </del> | $\vdash$     | _        |
|             | 43         | _        | _        | <del> </del> | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$ |          | -            |     |               | 93       | -  |              |               |              | $\vdash$     |  | $\vdash$     |          |
|             | 44         | _        |          | ├            | H  | $\vdash$ | $\vdash$ | $\vdash$ |          | $\vdash$     |     |               | 94       |  | H            | $\vdash$      | -            | $\vdash$     | $\vdash$   | -            | -        |
|             | 45         |          |          |              | $\vdash$   |          | ⊢        | -        | -        | $\vdash$     |     |               | 95       | H  | H            | H             | -            | -            | $\vdash$   | -            | -        |
|             | 46         |          | -        | —            | $\vdash$   | $\vdash$ | -        | -        | -        |              |     |               | 96       | -  | $\vdash$     |               |              | -            |  | <b>-</b>     | -        |
|             | 47         | _        |          | -            | $\vdash$   | $\vdash$ | $\vdash$ | -        | $\vdash$ |              |     |               |          | -  | $\vdash$     |               | $\vdash$     |              |  | Η-           | -        |
|             |            | _        | -        | _            | $\vdash$   | $\vdash$ | $\vdash$ | _        |          | $\vdash$     |     |               | 97       | -  | $\vdash$     |               | $\vdash$     | $\vdash$     | -  | $\vdash$     | -        |
|             | 48         | _        | <u> </u> | <u> </u>     | H  | <b>—</b> | <u> </u> | _        | -        | H            |     |               | 98       | -  |              |               | $\vdash$     |              | L  | Ш            |          |
|             | 49         |          |          | <b> </b>     | _  | _        | $\vdash$ | ļ        | $\vdash$ | $\vdash$     | 0   |               | 99       | _  | Щ            |               | Ш            | L.           |  | Щ            | Щ.       |
|             | 50         |          | :        | l            | ı  |          | 1        | ĺ        | ı        | 1            |     |               | 100      |  |              |               |              | 1            |  | 1            | 1        |

| Claim         Date           E         E           E         E           E         E           E         E           E         E           E         E           D         101           102         103           104         105           106         107           108         109           110         111           112         113           114         115           116         117           118         119           120         121           122         123           124         125           125         126           127         128           129         130           131         132           133         134           135         136           137         138           139         140           141         142           143         144           145         146           146         147           148         149           150         150 | _        | •   |          |              |          |          |              |                |          |          |                 |  |  |
|--|----------|-----|----------|--------------|----------|----------|--------------|----------------|----------|----------|-----------------|--|--|
| Te   Fe   Fe   Fe   Fe   Fe   Fe   Fe  | CI       | aim | Date     |              |          |          |              |                |          |          |                 |  |  |
| 102  |          |     |          |              |          |          |              |                |          |          |                 |  |  |
| 103  |          | 101 |          |              |          |          |              |                |          |          | H               |  |  |
| 103  | 1        | 102 | -        |              |          |          |              |                |          |          | П               |  |  |
| 106  |          | 103 |          |              |          |          | Г            |                | Γ        |          | П               |  |  |
| 106  |          | 104 |          |              |          |          |              |                |          |          | П               |  |  |
| 106  | :[       | 105 |          |              |          |          |              |                |          |          |                 |  |  |
| 108 109 110 111 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |          | 106 |          |              |          |          |              |                |          |          |                 |  |  |
| 109  |          | 107 |          |              |          |          |              |                |          |          |                 |  |  |
| 110         111         112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  | <b>├</b> | 108 |          |              |          | _        | <u> </u>     | 乚              |          |          | Ц               |  |  |
| 111         112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  |          | 109 |          |              | _        | _        | _            | _              |          |          | Ц               |  |  |
| 112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  | <u> </u> | 110 |          | _            | _        | _        | <u> </u>     | _              | _        |          | Ц               |  |  |
| 115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  |          | 111 | $\vdash$ | <u> </u>     | <u> </u> | ļ        | _            | ⊢              | <u> </u> | <u> </u> | Щ               |  |  |
| 115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  | <u> </u> | 112 | _        | <u> </u>     | <u> </u> | <u> </u> | <u> </u>     |                |          | <u> </u> | Щ               |  |  |
| 115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  |          | 113 | <u> </u> |              | ├-       |          | <u> </u>     | ⊢              | $\vdash$ | <u> </u> | Н               |  |  |
| 116  |          | 114 | H        | ├            | ⊢        | <u> </u> | <u> </u>     | <del>  -</del> | -        | <u> </u> | $\vdash \vdash$ |  |  |
| 117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  | -        | 115 | $\vdash$ | <u> </u>     | <u> </u> | _        | <b>.</b>     | ⊢              | <u> </u> |          | $\vdash$        |  |  |
| 118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  | -        | 110 |          | ⊢            | ├        |          | <del> </del> | ⊢              |          | ┡-       | Н               |  |  |
| 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |          | 117 | _        |              | H        | _        | ⊢            | ⊢              | $\vdash$ | $\vdash$ | Н               |  |  |
| 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |          | 110 |          |              | ├—       |          | ┝            | ├              |          |          | H               |  |  |
| 123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 120 |          | -            | ┝        |          | ┝            | ├              | -        | ├        | Н               |  |  |
| 123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   | $\vdash$ | 121 | -        | -            |          | -        | $\vdash$     | <del> </del>   | $\vdash$ | H        | Н               |  |  |
| 123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   | $\vdash$ | 122 |          | -            | -        | -        | -            | -              | ├        | H        | Н               |  |  |
| 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  | 1        | 123 |          | -            | -        | _        | -            | -              | $\vdash$ |          | $\vdash$        |  |  |
| 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |          | 124 |          |              | -        |          | $\vdash$     |                | -        | $\vdash$ | -               |  |  |
| 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |          | 125 |          |              | $\vdash$ |          |              |                | _        |          | $\vdash$        |  |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 126 |          |              |          |          |              |                |          |          | Н               |  |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 127 |          |              |          |          |              |                |          |          | П               |  |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 128 |          |              | Г        |          |              |                |          |          | П               |  |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   | -        | 129 |          |              |          |          |              |                |          |          |                 |  |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 130 |          |              |          |          |              |                |          |          |                 |  |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 131 |          |              |          |          |              |                |          |          |                 |  |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 132 |          |              |          |          |              | _              |          | نـــا    |                 |  |  |
| 136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148  | -        | 133 |          | $oxed{oxed}$ |          |          |              |                |          |          | Ш               |  |  |
| 136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148  |          | 134 |          | <u> </u>     | <u> </u> |          | L            |                | <u> </u> | L        | $\square$       |  |  |
| 137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   | 1-       | 135 |          | <u> </u>     | -        |          |              |                |          |          | Щ               |  |  |
| 139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 136 | _        |              |          | _        |              | _              |          |          | Ш               |  |  |
| 139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |          | 137 |          | _            |          |          | _            | _              | _        |          | $\dashv$        |  |  |
| 140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148<br>149   |          | 138 | $\vdash$ | $\vdash$     |          |          |              |                | _        |          | $\dashv$        |  |  |
| 141<br>142<br>143<br>144<br>145<br>146<br>147<br>148<br>149  |          | 440 | -        |              |          | _        | _            | _              | _        |          | -               |  |  |
| 142<br>143<br>144<br>145<br>146<br>147<br>148  | -        | 1/1 | Н        |              |          | _        | _            | _              | _        | _        | Н               |  |  |
| 143<br>144<br>145<br>146<br>147<br>148<br>149  | -        |     | $\vdash$ |              |          |          |              | -              | _        | _        | Н               |  |  |
| 144<br>145<br>146<br>147<br>148<br>149   |          | 143 | $\vdash$ | $\vdash$     | $\vdash$ | _        | _            | Н              | $\vdash$ | Н        | $\dashv$        |  |  |
| 145<br>146<br>147<br>148<br>149  | $\vdash$ |     | H        | $\vdash$     |          |          | H            |                | Н        | Н        | $\dashv$        |  |  |
| 146<br>147<br>148<br>149   |          |     | Н        |              |          |          |              |                | т        | М        | $\vdash$        |  |  |
| 147<br>148<br>149  |          |     |          | $\vdash$     | П        |          |              |                | _        |          | $\dashv$        |  |  |
| 148  |          | 147 |          |              |          |          |              |                |          |          | $\sqcap$        |  |  |
| 149  |          |     |          | П            |          |          |              |                |          |          | П               |  |  |
| 150  |          | 149 |          |              |          |          |              |                |          |          |                 |  |  |
|  |          | 150 |          |              |          |          |              |                |          |          |                 |  |  |